

REMARKS

In the subject Office Action, claims 18-20 have been rejected under the first and second paragraphs of 35 U.S.C. 112. In response, claim 18 has been cancelled and the reference to “within 0.4% of a predetermined value” has been deleted from claim 19. Claim 20 is dependent on claim 19. As a result, Applicants respectfully submit that all claims are now proper under 35 U.S.C. 112.

Claims 1, 4-8, 11, 15 and 17 have been rejected in the subject Office Action under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,161,060 to Collins. In addition, claims 1, 4-7, 10, 14, 16 and 17 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,796,703 to Lemke. Claims 1, 6-9, 11, 14, 16 and 17 have also been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0102380 to Fulton et al.

In response to these rejections, independent claim 1 has been amended to more clearly recite that the accurate blending module of the invention is portable and mounted upon a skid. In addition, independent claim 17 has been amended to recite that the present invention offers a method for retrofitting a laboratory or industrial system so that it receives an accurately blended liquid stream and that the method includes the step of providing a portable accurate blending module. Independent claim 19 has also been amended to recite a portable module with a detection submodule that is adapted to connect to a laboratory or industrial system and provide a blended liquid stream to the laboratory or industrial system. Applicants respectfully submit that amended independent claims 1, 17 and 19 are patentable over the cited references.

The present invention offers a portable accurate blending module and a method of retrofitting laboratory or industrial systems so that they are provided with an accurately blended liquid stream as an input. The present invention therefore permits industrial and laboratory systems that previously used pre-mixed chemicals to receive the benefits of on-site blending, which are described in lines 28-29 on page 1 and in lines 5-14 on page 2 of the specification, via a retrofit that is quickly and easily performed. By providing an accurately blended input stream, the present invention also improves the performance of laboratory and industrial systems so that quality control concerns are addressed. The portable accurate blending module and retrofit method of the present invention are very flexible as they offer a way to retrofit laboratory and industrial systems ranging from small scale bench top units to large scale manufacturing systems.

The Collins '060 patent discloses a blending system that provides fuel having a desired octane level. The systems of Figs. 1 and 2 each use a controller board (12 and 45, respectively) that control pumps that deliver fuels having different octane levels to a blending valve and then to a nozzle for dispensing. As such, the system is designed for use at a gas station or the like and thus is not portable, as recited by amended claims 1, 17 and 19, and is not mounted on a skid, as recited by amended claim 1. In addition, the system of Fig. 1 does not provide feedback with regard to the blended product and thus does not provide a detection module as recited by amended claims 1, 17 and 19 of the subject application. Both the systems of Figs. 1 and 2 also lack a means for connecting to a laboratory or industrial system, a recited by amended claims 1, 17 and 19.

The Lemke '703 patent discloses a system that mixes slurry and a dilutent. The slurry and dilutent are delivered to a mix vessel (402 in Fig. 4) and then the outlet of the mix vessel is circulated around a loop where the content of the mixture is detected and used to adjust the

amount of slurry and diluent that are added to the circulating mixture and mix vessel, respectively. Notably, the mixture in the loop is returned to the mix vessel. The system of the Lemke ‘703 patent does not connect to a laboratory or industrial system to deliver the mixture thereto as recited by amended claims 1, 17 and 19. In

The published Fulton et al. application does not disclose a controller in communication with a detection module, as recited by amended claims 1, 17 and 19. The inclusion of a controller is key to obtaining the desired blending accuracy in the portable accurate blending module and method of retrofitting of the present invention. In addition, Fulton et al. does not disclose a module and/or method for retrofitting a laboratory or industrial system, as recited by amended claims 1, 17 and 19. In addition, the system of Fulton et al. is not portable as recited by amended claims 1, 17 and 19. There is thus no motivation to mount the system of Fulton et al. on a skid, as recited by amended claim 1.

As a result, Applicants respectfully submit that independent claims 1, 17 and 19, and thus the claims which are dependent thereon, are patentable over the cited references.

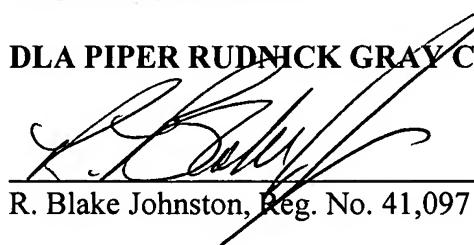
Amended claim 2 of the subject application recites that the skid of the portable accurate blending module features rollers. This feature is not present in the recited references and, as a result, claim 2 may be further distinguished there from.

Claims 3 and 20 recite a purge valve that is in communication with the outlet of the detection submodule and the controller so that the controller may open the purge valve when the detected characteristic of the blended product exceeds a predetermined tolerance. Applicants respectfully submit that this arrangement is also not disclosed, suggested or taught by the cited and references and thus claims 3 and 20 may also be further distinguished there from.

In view of the foregoing amendments and remarks, it is believed that the application is in condition for allowance and such action is respectively requested. If the Examiner believes that a telephone conference would advance the prosecution of the case, it is requested that the undersigned attorney be telephoned for that purpose.

Respectfully submitted,

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